





Case No.: 2005-00174  
Questions From: Public Service Commission – September 9, 2005  
Response from: Hopkinsville Water Environment Authority  
Sponsoring Witness: Jennings Rowe McKinley II and Lennis Franklin Hale

**INFORMATION REQUEST NO. 11.**

Provide all schedules in the revised Cost-of-Service study and all supporting schedules on a computer diskette in Microsoft Excel 97 format.

**RESPONSE:**

Please see HWEA's Response to Commission Information Request No. 10.

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**INFORMATION REQUEST NO. 12.**

Refer to the Cost-of-Service Study, Table 14.

a. Provide a detailed breakdown of the \$351,600 expenses categorized as

Distribution (All Other) shown at Line 9.

**RESPONSE:**

Line 9 of Table 14 on page 28 of the B&V Report includes Supervision (\$57,700); Labor (\$191,600); Supplies (\$42,400); Repairs to Distribution, Structures, Reservoirs, & Standpipes (\$0); Transportation Expense (\$22,200); Gas, Oil, Tires, etc. related to the Tractor/Compressor (\$21,600); Grounds and Maintenance (\$9,900); Training, Education, and Licenses (\$4,600); Small Tools (\$1,600); and Miscellaneous Expenses (\$0) associated with Water Distribution.



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**INFORMATION REQUEST NO. 12.**

Refer to the Cost-of-Service Study, Table 14.

b. Provide a detailed breakdown of the \$98,700 expenses categorized as Technical Services and shown at Line 10.

**RESPONSE:**

Line 10 of Table 14 on page 28 of the B&V Report includes Labor (\$90,600); Supplies (\$2,500); Training, Education and Licenses (\$1,100); Transportation Expense (\$4,000); and Miscellaneous Expenses (\$500) associated with Technical Services.



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**INFORMATION REQUEST NO. 12.**

Refer to the Cost-of-Service Study, Table 14.

c. Provide a detailed breakdown of the \$1,011,500 expenses categorized as Admin. & General (All Other) and shown at Line 13.

**RESPONSE:**

Line 13 of Table 14 on page 28 of the B&V Report includes Commissioner's Fees (\$3,100); Office Salaries (\$291,300); Employee Benefits (\$391,800); Amortization of CERS Retirement (\$0); Office Supplies (\$38,100); Telephone (\$18,800); Insurance and Bonds (\$130,100); Professional Services (\$31,300); Safety Program (\$33,400); Office Building Maintenance (\$29,700); Bad Debts (\$0); Training, Education and Licenses (\$1,500); Transportation Expense (\$20,800); and Miscellaneous Expense (\$21,600) associated with Water Administrative and General.



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**INFORMATION REQUEST NO. 12.**

Refer to the Cost-of-Service Study, Table 14.

d. Provide a detailed explanation of the \$80,200 categorized as Payments to CCWD and shown at Line 15.

**RESPONSE:**

Please see page 12 of the B&V Report for an explanation of the payment to the CCWD.





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**INFORMATION REQUEST NO. 13.**

At page 25, the Cost-of Service Study states that “[a] ratio of maximum hour to annual average day water use of 2.0 is used, based on demands experienced by the system.”

a. Describe how Mr. McKinley determined maximum hour water use. Show all calculations and state any assumptions that Mr. McKinley used.

**RESPONSE:**

Five years of historical average day and maximum day demands were provided by the HWEA, a copy of which is attached as Exhibit No. 13a. The maximum max day to average day ratio over that five-year period was 1.3 and was used as the ratio of system max day demand to average day demand for cost allocation purposes. Max hour demand data was not available for the system, therefore a review of the system coincidental max day and max hour demand ratios for similar sized utilities was conducted (see table on the next page). The average ratio of MH/AD to MD/AD for these water systems was 1.46 which, when applied to the max day to average day demand ratio of 1.3 for HWEA, produces a max hour to average day demand ratio of 1.90. A maximum hour to average day demand ratio of 2.0 was used for purposes of the B&V Report.

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Location		Water Sales mgd	System Coincidental Demand Ratios		Ratio of MD/AD to MH/AD
City	State		MD/AD	MH/AD	
HWEA		4.90	1.30		
Bloomington	IL	6.40	1.67	2.50	1.50
Danville	IL	7.88	1.35	1.87	1.39
Jasper	AL	4.20	1.60	2.40	1.50
Leavenworth	KS	3.13	1.85	2.78	1.50
Parkersburg	WV	5.99	1.40	2.00	1.43
Average		5.52	1.57	2.31	1.46

Item 13. a.



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**INFORMATION REQUEST NO. 13.**

At page 25, the Cost-of Service Study states that “[a] ratio of maximum hour to annual average day water use of 2.0 is used, based on demands experienced by the system.”

b. Provide the measurements or data upon which Mr. McKinley relied to determine maximum hour water use.

**RESPONSE:**

Please see HWEA’s Response to Commission Information Request No. 13a.



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**INFORMATION REQUEST NO. 13.**

At page 25, the Cost-of Service Study states that “[a] ratio of maximum hour to annual average day water use of 2.0 is used, based on demands experienced by the system.”

c. Describe how Mr. McKinley determined annual average day water use. Show all calculations and state any assumptions that Mr. McKinley used.

**RESPONSE:**

Please see HWEA’s Response to Commission Information Request No. 13a.



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**INFORMATION REQUEST NO. 13.**

At page 25, the Cost-of Service Study states that “[a] ratio of maximum hour to annual average day water use of 2.0 is used, based on demands experienced by the system.”

d. Provide the measurements or data upon which Mr. McKinley relied to determine annual average day water use.

**RESPONSE:**

Please see HWEA’s Response to Commission Information Request No. 13a.





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**INFORMATION REQUEST NO. 14.**

Refer to Cost-of-Service Study at 26 “Allocation of Operating Expenses.”

- a. List the water line sizes that Mr. McKinley considers to be “small mains.”

**RESPONSE:**

Small mains are defined as mains 4 inches in diameter and smaller. Large mains are defined as main 6 inches in diameter and larger.



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**INFORMATION REQUEST NO. 14.**

Refer to Cost-of-Service Study at 26 "Allocation of Operating Expenses."

- b. List the water line sizes that Mr. McKinley considers to be "large mains."

**RESPONSE:**

Please see HWEA's Response to Commission Information Request No. 14a.



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**INFORMATION REQUEST NO. 15.**

Refer to Cost-of-Service Study at 37, Table 19. The proposed wholesale rates decline with usage until more 90 cubic feet of water is used. Explain why CCWD's usage of more than 90 cubic feet of water will result in increasing, rather than declining costs to HWEA's system. Identify all portions of the AWWA Manual M1 that support this proposed rate design.

**RESPONSE:**

The principles of the AWWA Manual M1, in conjunction with the service contract and its amendments between HWEA and CCWD, were utilized in developing the total cost of service allocable to CCWD. The nature of the rate structure from which the total cost of service to CCWD is recovered, is a function of the rate structure identified in the contract modification agreement signed by the parties on June 19, 1996, which impacts the first three rate blocks of the proposed rates for CCWD, and the total cost of service allocated to CCWD, which is recovered from the unit price proposed for the fourth rate block shown in Table 19 of the B&V Report.

In addition, as discussed on page 38 of the B&V Report, the proposed rates and rate structure for CCWD take into consideration the existing contractual provisions of the contract between HWEA and CCWD and the cost of service allocations to CCWD determined in the B&V Report. The first three blocks of the proposed rates to CCWD reflect a factor of 1.3 times the proposed Hopkinsville retail rates, recognizing the contract modification agreement between the two parties dated June 19, 1996 as well as the Commission's December 17, 2003 Order in Case No. 2003-00087, *In the matter of: Investigation of the Hopkinsville Water Environment Authority Wholesale Rate to Christian County Water District* which approved that wholesale rate

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methodology. The existing rates applicable to CCWD, at the time the B&V Report was being prepared, contained a “fourth” volumetric rate block which is not tied to the Hopkinsville retail rates which were existing at the time of the Black & Veatch study. The unit volumetric rate for this fourth rate block for service to CCWD, as proposed in the B&V Report, is established at a level to recover the total cost of service allocable to CCWD which is not recovered through the revenues generated from the first three rate blocks.



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**INFORMATION REQUEST NO. 16.**

Describe how the methodology that HWEA used to establish the proposed wholesale rates is consistent with the methodology set forth in the AWWA Manual M1.

**RESPONSE:**

Please see HWEA's Response to Commission Information Request No. 15.





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**INFORMATION REQUEST NO. 17.**

Refer to the Direct Testimony of Mr. McKinley at 12.

- a. Describe the analysis that Mr. McKinley performed on the historical demands of

HWEA system.

**RESPONSE:**

Please see HWEA's Response to Commission Information Request No. 13a.